

Notice of Allowability

Application No.

10/815,826

Applicant(s)

BALTOIU ET AL

Examiner

Kuo-Liang Peng

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/7/07 Amendment.
2. ☒ The allowed claim(s) is/are 1, 4 and 5.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Kuo-Liang Peng
Primary Examiner
Art Unit: 1712

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 7, 2007 has been entered. Claims 1 and 5 are amended. Claims 2-3 and 6-10 are deleted. Now, Claims 1 and 4-5 are pending.

Examiner's Amendment

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

3. Authorization for this examiner's amendment was given in a telephone interview with Paul Sharpe on September 14, 2007.

The application has been amended as follows:

In Claim 5 (line 1), replace "claim 1" with -- claim 4 --.

4. Claim rejection(s) under 35 USC 112 in the previous Office Action (Paper No. 20070413) is/are removed.

5. Claim rejection(s) under 35 USC 102 and 103 in the previous Office Action (Paper No. 20070413) is/are removed.

Allowable Subject Matter

6. Claims 1 and 4-5 are allowed.

7. The following is an examiner's statement of reasons for allowance:

The present claims are allowable for at least the following reason(s) over the closest references: Weaver (US 6 488 091) and Mondshine (US 4 619 776)

Weaver teaches a composition which can comprise a polysaccharide and diesel in amounts within the scope of the present invention (see column 8, lines 19-32 and column 6, lines 18-25). An enzyme breaker can be used at a level of up to 1% (column 9, lines 15-31). However, as Applicants point out in Remarks (page 6, 2nd paragraph to page 7, 1st paragraph), Weaver teaches away the formation of an **emulsion** when the composition is brought in contact with a subterranean formation fluid. (col. 6, line 51 to col. 7, line 3) Thus, Weaver does not teach an

emulsifying drilling fluid for drilling in high oil viscosity tar sand formation containing water, **tar**, sand and **oil** entrained therein, comprising:

a polysaccharide based polymer in an amount from between .05% and 5% by volume;

an aliphatic hydrocarbon solvent in an amount from between 1% and 20% by volume for **removing tar** and **oil** from said tar sand; **whereby** an **emulsion** is formed having said water as an **external phase** and said aliphatic hydrocarbon as an **internal phase** of said emulsion, said emulsion containing said oil therein; and

an enzyme based emulsion breaker in an amount from between .05% and 10% by volume for **releasing** said **oil** from said **emulsion**.

Mondshine (US 4 619 766) discloses a fracturing fluid comprising an aqueous medium, a polymeric viscosifier which is capable of being crosslinked with boron, and a sparingly soluble borate crosslinking agent. (col. 5, line 31 to col. 6, line 59) An enzyme can be used as a breaker additive. Mondshine further teaches that the enzyme breaker additive is used, in a delayed manner, for breaking the crosslinked polymeric viscosifier as taught in US 4 169 798. (col. 9, lines 50-61) Thus, Mondshine does not teach an emulsifying drilling fluid for drilling in

high oil viscosity tar sand formation containing water, **tar**, sand and **oil** entrained therein, comprising:

a polysaccharide based polymer in an amount from between .05% and 5%
by volume;

an aliphatic hydrocarbon solvent in an amount from between 1% and 20%
by volume for **removing tar** and **oil** from said tar sand; **whereby** an
emulsion is formed having said water as an **external phase** and said
aliphatic hydrocarbon as an **internal phase** of said emulsion, said
emulsion containing said oil therein; and

an enzyme based emulsion breaker in an amount from between .05% and
10% by volume for **releasing** said **oil** from said **emulsion**.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is

(571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

klp
September 18, 2007



Kuo-Liang Peng
Primary Examiner
Art Unit 1712